

REMARKS

Claims 16-20 have been canceled, and claims 1-6 and 13 have been amended. Therefore, claims 1-6, 8, 9, and 11-15 are pending in this application.

Each of canceled claims 16-20 was directed to the same limitation and this limitation has been added to each of independent claims 1-4 and 6. These claims stand rejected as being unpatentable over Valentine, U.S. Patent No. 6,011,973, Shinozuka, JP 10-332407, Takechi, JP 09-035192 or Nakamura, U.S. Patent No. 6,085,096 in view of Davenport et al, U.S. Patent No. 6,487,393 (Davenport) under 35 U.S.C. §103. In particular, Davenport is relied upon for disclosing the limitation added to each of the independent claims that has been taken from canceled claims 16-20. Applicants request reconsideration of the rejection of these claims based on Davenport as the secondary reference for the following reasons.

Davenport is relied upon for disclosing that the frequency of the position calculation can be based on speed, referring to col. 2, lines 60-63 of the reference. However, Applicants claim that the frequency of position calculation is increased when the mobile station approaches the target position at high speed and is reduced when the mobile station

approaches the target position at low speed. Specifically, the position calculation controller of the invention uses a history of the result of the position comparison by the position comparator and executes the increasing or reducing of the frequency of the position calculation. On the other hand, Davenport uses the measurement of communication link quality, such as a signal strength meter of a cellular telephone and correlates the signal quality to the location along a route to provide information that is recorded, for example on-board a train locomotive (see, col. 3, lines 1-2 of Davenport). The correlation between communication link quality and position is calculated based upon a time delay and the time delay can be changed according to a function of the speed of travel. Davenport, therefore, does not disclose the comparing of the relative position between a present position of a mobile station and the target position. Accordingly, Davenport does not disclose using the speed at which the mobile station approaches a target position as a parameter in controlling the increasing or reducing of the frequency of the position calculation by a position calculator, as claimed by Applicants.

In Davenport, the periodic time delay 15 is adjusted according to speed in order to provide greater or fewer

sampling points that correlate communication signal quality to geographic position depending upon the speed of the mobile station. On the other hand, in the present invention, the relative position of the mobile station and the target position is considered in controlling the increase or reduction of the frequency of position calculation, particularly so that a user may obtain confirmation of the user's relative position to the target position at high frequency when the user approaches the target position at a higher speed. Davenport is not concerned with the subject of the present invention which relates to a mobile station capable of calculating a current position by position calculation, therefore one having ordinary skill in the art would not apply the teachings of the reference to the claimed invention in the manner set forth in the Office Action. Accordingly, reconsideration of the 35 U.S.C. 103 rejections of claims 1-4 and 6, as amended, is respectfully requested.

With respect to claim 5, the claim includes the position calculation controller in combination with a switch for a ringer that makes on or off a ringer when a telephone signal arrives at the mobile station based on the result of the position comparison compares the current position with the target position. Further, claim 5 calls for a ringer

controller that controls a switching operation of the ringer switch by using the result of the position comparison by the position comparator. As set forth on page 11, lines 9-19, the ringer on a mobile station may be off when a telephone signal arrives at the mobile station based on the result of the position comparison by the position comparator. By the present invention, the user can receive a signal and recognize the arrival of the telephone signal even if the ringer is off.

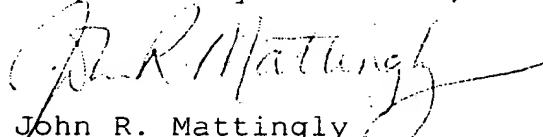
Claim 5 is rejected under 35 U.S.C. 103 over Valentine in view of official notice. Applicants respectfully traverse the rejection for the following reasons.

In Valentine, the enabling or disabling of the transmitting by transceiver 110 is controlled in accordance with the current geographical location of the telephone. There is no disclosure by Valentine of enabling the ringer of the telephone to respond to a telephone signal arriving at the telephone based on the result of position comparison by a position comparator. Accordingly, the invention as set forth in claim 5 is not obvious to one having ordinary skill in the art in view of Valentine, whether the reference is considered in combination with the Official Notice that is set forth in the Office Action or not. Accordingly, the 35 U.S.C. 103 rejection of claim 5 should be withdrawn.

The remainder of the pending claims, claims 8, 9 and 11-15 are dependent claims. Each of these claims is patentable over the art of record at least for depending from a patentable base claim that is asserted to patentable for the foregoing reasons. Accordingly, each of these claims should be allowed along with the independent claim from which it depends.

In view of the foregoing amendments and remarks, reconsideration and reexamination are respectfully requested.

Respectfully submitted,


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